Appl. No.: 10/648,360

Amendment dated January 25, 2007

Office Action dated October 26, 2006

Docket No.: 1248-0665P

Page 3 of 11

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A tuner for use in a cable modem, comprising:

a reception processing section for receiving a signal transmitted from a communication line;

and

a return path circuit for transmitting to the communication line a signal transmitted from

a signal processing section,

the cable modem including the tuner for transmitting and receiving an analog signal to and

from the communication line and the signal processing section for performing modulation and demodulation

with respect to a signal transmitted and received by the tuner,

the return path circuit including a return path amplification circuit for performing power

amplification of a signal transmitted from the signal processing section,

wherein the cable modem includes the tuner for transmitting and receiving an analog signal

to and from the communication line and the signal processing section for performing modulation and

demodulation with respect to a signal transmitted and received by the tuner, the tuner and the signal

processing section being formed on different boards.

2. (Previously presented) The tuner according to claim 1, wherein the return path circuit

comprises a filter for removing noise included in a signal transmitted from the signal processing section.

3. (Previously presented) The tuner according to claim 1, wherein separate routes supply

power to the return path amplification circuit and power to components other than the return path

amplification circuit in the tuner.

4. (Original) The tuner according to claim 1, wherein circuits constituting the reception

processing section and the return path circuit are provided on one surface of a board.

Appl. No.: 10/648,360 Docket No.: 1248-0665P Amendment dated January 25, 2007 Page 4 of 11

Amendment dated January 25, 2007 Office Action dated October 26, 2006

5. (Original) The tuner according to claim 1, wherein the return path circuit includes a

balanced-to-unbalanced conversion transformer for converting a balanced output from the return path

amplification circuit to an unbalanced output and a matching inductor which is provided on an output side of

the balanced-to-unbalanced conversion transformer.

6. (Original) The tuner according to claim 1, wherein the return path circuit is surrounded by a

partition member having electrical and electromagnetic shielding effect.

7. (Original) The tuner according to claim 1, wherein the reception processing section includes

a PLL circuit used in performing frequency conversion and a DC-DC converter as a regulator for supplying

power to the PLL circuit, and

the DC-DC converter is surrounded by a partition member having electrical and

electromagnetic shielding effect.

8. (Original) The tuner according to claim 1, wherein the reception processing section

performs reception processing in accordance with a single conversion system for converting a frequency of a

received signal into an intermediate frequency, and includes an intermediate frequency AGC amplification

circuit for amplifying an intermediate frequency signal in accordance with an IF AGC signal transmitted

from the signal processing section.

9. (Currently amended) A cable modem comprising:

a tuner for transmitting and receiving an analog signal to and from a communication line;

and

a signal processing section for performing modulation and demodulation of transmitted and

received signals to and from the tuner,

the tuner including a reception processing section for receiving a signal transmitted from the

communication line; and

a return path circuit for transmitting to the communication line a signal transmitted from the

signal processing section,

Appl. No.: 10/648,360 Docket No.: 1248-0665P Page 5 of 11

Amendment dated January 25, 2007 Office Action dated October 26, 2006

the return path circuit including a return path amplification circuit for performing power amplification of a signal transmitted from the signal processing section,

wherein the tuner and the signal processing section are formed on different boards.

10. (New) The tuner according to claim 1, wherein the return path amplification circuit includes a preamplifier, a digital gain control circuit, and a power amplification circuit.

11. (New) The cable modern according to claim 9, wherein the return path amplification circuit includes a preamplifier, a digital gain control circuit, and a power amplification circuit.